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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/380,519      | 09/03/1999  | Petri Horppu         | 1103326-0584        | 2727             |

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White & Case  
Patent Department  
1155 Avenue of The Americas  
New York, NY 10036-2787

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| EXAMINER |
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MCEVOY, THOMAS M

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| ART UNIT | PAPER NUMBER |
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3731

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05/10/2012

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/380,519 | <b>Applicant(s)</b><br>HORPPU ET AL. |  |
|                              | <b>Examiner</b><br>THOMAS MCEVOY     | <b>Art Unit</b><br>3731              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2012.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 5) ☒ Claim(s) 1,2,5-9 and 15-18 is/are pending in the application.
- 5a) Of the above claim(s) 17 and 18 is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1,2,5-9,15 and 16 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 2, 5-9, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoon (US 4,548,201) in view of Clark et al. (US 5,643,290).

**Regarding claim 1**, Yoon discloses a mounting apparatus for mounting an endless cord 10 which is expandable from a contracted condition to an expanded condition onto an end of a structure (cylinder B) having a transverse dimension greater than that of the cord when in the contracted condition, said apparatus comprising a tapered adaptor 100 for the cord to be propelled over onto the end of the structure having a forward smaller end for location in the cord in its contracted condition and a

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rear larger end for juxtaposing with the end of the structure (Figure 18), said apparatus further comprising an expander device (Figure 21A) movable relative to the adaptor to propel the cord over the adaptor onto the rear larger end thereof, wherein the adaptor comprises a plurality of circumferentially spaced-apart fingers (formed by channels 108 or as created in view of Clark et al. and explained below) which extend from the rear larger end towards the forward smaller end and the expander device has a circumference and comprises a plurality of circumferentially spaced-apart arms and wherein the inner thickness of each arm tapers in a radial direction towards the center of the circumference (evident from Figure 21A – see cross-section at end of structure). Yoon discloses that the expander should provide even pushing force to the cord (col. 3, line 66 to col. 4, line 3). Yoon fails to disclose that the arms are insertable between the fingers of the adaptor. Clark et al. teach that it is advantageous to insert arms of an expander device between fingers of an adaptor to provide better alignment and loading of a cord (Abstract; col. 2, lines 42-46; col. 4, lines 18-20; col. 12, lines 42-50; col. 13, lines 17-25). It would have been obvious to one of ordinary skill in the art in view of Clark et al. and at the time of Appellant's invention to have provided ribs on the underside of the arms of Yoon and slots on the adaptor in order to better align the adaptor and expander and provide even pushing force to the cord. One of ordinary skill in the art would also recognize that since the Yoon intends to prevent bending or damage of teeth/pins (18, 28, 38, etc.; col. 11, lines 15-26), the keyed alignment provided in view of Clark et al. would prevent rotation of the expander which could cause rotation of the teeth in channel 108. With this modification, the arms of the

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expander would have a portion (ribs) insertable between fingers (created by the slots) of the adaptor. With or without this modification, all surfaces of each arm projecting from the circumference could be considered as exposed in light of Yoon's specification (see Abstract where pins 18 of ring 12 are considered as having exposed ends projecting into the lumen).

**Regarding claim 2**, the expander device is operable in a first mode thereof to propel the cord over the adaptor on to the rear larger end thereof and in a second mode thereof to propel the cord from the rear larger end onto the end of the structure (col. 3, line 66 to col. 4, line 3 of Yoon).

**Regarding claim 5**, with the above modification, the adaptor and the expander device would be adapted to mesh with one another to propel the cord over the adaptor to the rear larger end thereof when modified in view of Clark et al. as explained above.

**Regarding claim 6**, Yoon discloses that the thickness of the circumferentially spaced-apart fingers of the adaptor taper in a radial direction towards the forward smaller end of the adaptor (col. 11, lines 47-53 of Yoon; the fingers created by providing slots or channels on the adapter would have the claimed tapering).

**Regarding claim 7**, the forward smaller end of the adaptor is presented by a central member 104 of Yoon.

**Regarding claim 8**, the central member and the fingers of the adaptor are connected to one another (Figure 18 of Yoon).

**Regarding claim 9**, the expander device includes a tubular section adapted to slide over the adaptor to propel the cord from the rear larger end thereof onto the end of the structure (for instance, the section directly above the 'Figure 21A' label).

**Regarding claim 15**, Yoon discloses providing the apparatus in a kit (col. 3, lines 28-30).

**Regarding claim 16**, the kit further comprises a surgical instrument 200 for ligating internal body tissue (Figure 23 of Yoon)

### ***Response to Arguments***

4. Applicant's arguments filed February 30<sup>th</sup> 2012 have been fully considered but they are not persuasive. Applicant has argued that the surfaces of the arms of Yoon are not exposed as claimed because they are not uncovered and visible. Applicant's specification does not further limit the definition of the term "exposed". In light of the specification of Yoon, this term can be broadly interpreted and not require these surfaces to be visible or uncovered as evidenced by Yoon's description of the pins 18 as being exposed when inside the lumen of the ring 12. The surfaces of the arms are open to exposure from air and light and are not completely covered. Applicant has argued that the inner thickness of the arms of Yoon are not tapered as claimed. Applicant has previously interpreted the "thickness" of the arms as being measured across the arms from one lateral side to the other. Therefore, the "inner thickness" of the arms could also be understood as representing this dimension as well. The specification does not describe these terms so as to further limit their broadest

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reasonable interpretation. It is suggested that the claims be amended to effectively require the thickness of the arms to taper continuously to the center of the circumference.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Thomas McEvoy** whose telephone number is **(571) 270-5034**. The examiner can normally be reached on Monday-Friday, 9:00 am – 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, ***please contact the examiner's supervisor, Tom Hughes at 571-272-4357***. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

***If there are any inquiries that are not being addressed by first contacting the Examiner or the Supervisor, you may send an email inquiry to***

***TC3700\_Workgroup\_D\_Inquiries@uspto.gov.***

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas McEvoy/

Examiner, Art Unit 3731